Soil Moisture Active Passive (SMAP) Applications Workshop NOAA Silver Spring Metro Complex Building 3 (SSMC3) 1325 East West Highway, Silver Spring, MD 20910 9-10 September 2009

The NASA Soil Moisture Active Passive (SMAP) mission has a targeted launch date of 2013 to provide global measurements of soil moisture and freeze/thaw state (http://smap.jpl.nasa.gov/). SMAP applications include improving drought and flood guidance, agricultural productivity estimation, weather forecasting, climate predictions, disease risk assessment, and national defense. A SMAP Applications Workshop is planned to share information about SMAP applications and to inform the SMAP Mission about the challenges facing SMAP users. The workshop will provide the input required to write the SMAP Applications Plan.

| 9 September Wednesday | | | |
|-----------------------|---|--|--|
| 7:30am | Registration | | |
| 8:30am | NOAA Leadership | NOAA Welcome | |
| - Noon | Dara Entekhabi, SMAP | SMAP Welcome, Charge to workshop | |
| | SDT Leader | | |
| | Brad Doorn, NASA | NASA Applied Sciences Program | |
| | Jared Entin, NASA | SMAP Program | |
| | Kent Kellogg, NASA | Overview of SMAP mission & instruments | |
| | Eni Njoku & Peggy | Overview of SMAP data products | |
| | O'Neill, NASA | - | |
| | 9:40-10 am Break Applications in the Context of SMAP Moderator Xiwu Zhan, NOAA SMAP Liaison | | |
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| | Stephane Belair, | Weather and climate forecasting | |
| | Environment Canada | | |
| | Michael Ek and Xiwu | Weather and climate forecasting | |
| | Zhan, NOAA NCEP | | |
| | James Verdin, USGS | Operational drought forecasting | |
| | Brian Cosgrove, NWS | Flood monitoring and prediction | |
| | OHD | | |
| | Wade Crow, USDA ARS | Agricultural productivity | |
| | Gregory Glass, JHBSPH | Human health | |
| | Michael Tischler, USACE | National defense | |
| | Ramakrishna Nemani, | Ecosystem carbon balance | |
| | NASA | | |
| | Poster Presenters | 1-min Oral Poster Introductions | |
| Noon - | Lunch and Posters | | |
| 1pm | | | |

The rest of the workshop will be characterized by small-group discussions (breakouts), organized by SMAP application areas to answer three questions:

- What are the known and potential SMAP applications?
- How will SMAP products be used to realize applications and what are the ancillary data needs?
- How can we engage the SMAP Community of Practice, identify the SMAP Community of Potential, and facilitate exchange with the SMAP Mission?

Each of the breakout sessions (I-III) feeds into the next, so we plan to have plenary sessions between breakouts to hear the reports.

| 9 Santami | per Wednesday (continued) | | | |
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| 1:00 - | | | | |
| 5:00 pm | Wade Crow, SMAP SDT Charge to Breakout I Breakout I SMAP Applications | | | |
| 3.00 pm | What are the known and potential SMAP applications? | | | |
| | | | | |
| | 3:00-3:30pm Break Planary Paparts from Preakout Land Discussion | | | |
| Plenary - Reports from Breakout I and Discussion | | | | |
| 8:30 am | 10 September Thursday | | | |
| | Randy Koster, SMAP SDT Charge to Breakout II | | | |
| - Noon | Breakout II – SMAP applications requirements/SMAP data products | | | |
| | How will SMAP products be used to realize applications and what are the ancillary data | | | |
| | needs? | | | |
| | 10:30-11:00 am Break | | | |
| ** | Plenary - Reports from Breakout II and Discussion | | | |
| Noon - | Lunch and Posters | | | |
| 1pm | A L W. L H GLAD ODE L GL D. L . W. | | | |
| 1:00 - | John Kimball, SMAP SDT Charge to Breakout III | | | |
| 4:30 pm | How can we engage the SMAP Community of Practice, identify the SMAP Community of Potential, and facilitate exchange with the SMAP Mission? 3:00-3:30 pm Break Plenary - Reports from Breakout III and Discussion | | | |
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| 4:30 pm | Susan Moran, SMAP SDT Final Summary and Discussion | | | |
| 5 pm | Adjourn | | | |
| 11 September Friday | | | | |
| 9-11am | SMAP Applications Plan Meet at GSFC. | | | |
| | Committee | | | |
| Acronyms | | | | |
| ARS | Agricultural Research Service | | | |
| GSFC | Goddard Space Flight Center | | | |
| JHBSPH | Johns Hopkins Bloomberg School of Public Health | | | |
| NOAA | National Oceanic and Atmospheric Administration | | | |
| NCEP | National Centers for Environmental Prediction | | | |
| NWS | National Weather Service | | | |
| OHD | Office of Hydrologic Development | | | |
| SDT | Science Definition Team | | | |
| SMAP | Soil Moisture Active Passive | | | |
| SSMC3 | Silver Spring Metro Complex Building 3 | | | |
| USACE | United States Army Corps of Engineers | | | |
| USDA | United States Department of Agriculture | | | |
| USGS | United States Geological Survey | | | |
| | nformation, please contact Dr. Susan Moran, <u>susan.moran@ars.usda.gov</u> or 520 670 6380 | | | |
| X171. | | | | |